



White Paper

## SAP Integration Methods

Choosing the Best Method of Integrating  
BarTender with SAP

# Choosing the Best Method of Integrating BarTender with SAP

## Print from within BarTender or SAP

When selecting a method of integrating BarTender's label printing functions with SAP, the primary consideration is whether you want to have the print job output by BarTender or SAPscript. (Note that, when printing from BarTender, you can still have SAP trigger and control the print job. In fact, your users don't even have to see BarTender or know that it's running.)

## SAP Server Load Considerations

Both print methods can be used to satisfy a variety of advanced labeling requirements. However, if you want to minimize the load on the SAP server, you should consider installing Commander and BarTender on a separate PC from SAP. You would use Commander to control BarTender and read from either SAP-generated IDocs, AII XML print requests, or BAPI-generated text files (as described in the "Printing from BarTender" section). This also reduces the SAP server load by removing the need to run any SAPscript.

## Printing from BarTender

When you print from BarTender, you have multiple options for both importing label data and for controlling BarTender.

## Data Source Options

### All (Auto ID Infrastructure)

AII is a part of the NetWeaver platform. It sends XML data packets over a TCP/IP socket that contain the data to print, the name of the format to print, and the name of the printer to print to. Commander receives this data and uses it to instruct BarTender to print labels. AII is particularly well suited for RFID applications.

### IDoc File

Within the ALE component of the SAP system, the user can choose an existing IDoc or create a new IDoc that contains the data to appear on the label. The user also defines within ALE the transaction(s) that will cause the IDoc to be generated and the destination directory into which to place the IDoc file.

### BAPI-Generated Flat, Text File

Within SAP, a BAPI can be written using ABAP to export a flat text file.

### SAPscript-Generated Flat, Fixed-Width Text File

A SAPscript report can be designed to generate a flat, fixed-width text file that contains the data to be printed on the label. (SAP can be configured to run this report any time label printing is desired.)

## BarTender Control Options

### Commander

Commander can be configured to monitor a folder or TCP/IP socket for the incoming data, which can be any of the types mentioned above. When detected, they are passed to BarTender, along with instructions on which label format to print and which printer to print to.

### ActiveX Automation

The SAP system can be configured to make ActiveX calls whenever label printing is desired. This can be used to control BarTender and specify the label format, printer, and data to be printed.

### Command Line

The SAP system can be configured to execute a command line to specify and launch BarTender print jobs. The command lines can specify the label format, desired printer, and label data source.

## Printing using SAPscript

When you print using SAPscript, BarTender simply provides the label formatting commands. SAPscript then supplies the label data, merges it with the label formatting commands, and sends the resulting print code to the printer. The procedure is as follows:

- 1) Design a label format in BarTender, with the printer settings set up properly for your desired printer.
- 2) Export the label format from BarTender in SAPscript ITF (Interchange Text Format). This template consists of a mix of printer commands with place holder tags to mark where the data fields are to be filled in by SAPscript. (The appropriate Seagull printer driver must be available when generating the ITF file. However, not all printer languages are compatible with ITF. Check with Seagull for a list of compatible printer drivers and models.)
- 3) Import the ITF file into SAPscript.
- 4) The SAP system can be configured to run the appropriate SAPscript report whenever label printing is desired. The SAPscript reporting engine then replaces the place holder tags with the appropriate label data and sends the resulting code to the desired printer.

Using print methods that do not use SAPscript, where BarTender outputs the job instead, will result in a system that is easier to maintain since format changes and printer configuration changes take place immediately and do not require updating the SAP system.

## Available Seagull White Papers

### General White Papers

- The Advantage of Drivers by Seagull
- Choosing the Right BarTender Edition
- Label System Security

### Companion Applications

- Printer Maestro, Part 1: Enterprise Print Management
- BarTender Security Center
- BarTender Web Print Server

### Recent Upgrades

- What's New in the Latest BarTender

### Integration White Papers

- Integration Overview
- Commander
- Commander Examples
- BarTender's .NET SDKs
- BarTender's ActiveX Automation Interface
- Exporting Printer Code Templates
- Using BarTender with Terminal Services and Citrix MetaFrame
- XML Integration with Oracle's WMS and MSCA

### Integration with SAP

- SAP Integration Methods
- Reading SAP IDocs
- SAP Auto Infrastructure Integration with BarTender

### Miscellaneous White Papers

- BarTender Enterprise Licensing
- Printing International Characters Using BarTender
- BarTender Software Activation
- Using BarTender's Application Identifier Wizard
- Optimizing Label Printing Performance
- Status Monitor Overview
- Silent Install

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